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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Chen et al. Art Unit : 1632  
Serial No. : 10/619,824 Examiner : Unknown  
Filed : July 14, 2003  
Title : TREATMENT AND PROPHYLAXIS WITH 4-1BB-BINDING AGENTS

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL

The following correspondence relating to this application is enclosed for filing:

1. Information Disclosure Statement (1 page);
2. Form PTO-1449 (3 pages);
3. Copies of Cited References (49 references); and
4. A Return Postcard.

Please date stamp and return the enclosed postcard. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: September 15, 2004

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INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449.

This statement is being filed before the receipt of a first Office action on the merits.

Since this application was filed after July 1, 2003, only copies of non-U.S. patent citations are being provided. Please apply any charges or credits to Deposit Account No. 06-1050.

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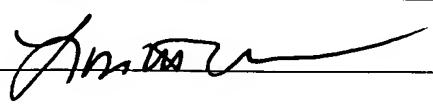
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Lisa M. Becker

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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 07039-427001	Application No. 10/619,824
Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant Chen et al.	
(37 CFR §1.98(b))		Filing Date July 14, 2003	Group Art Unit 1632

### U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	4,946,778	08/07/90	Ladner et al.			
	AB	5,674,704	10/07/97	Goodwin et al.			
	AC	5,874,240	02/23/99	Ni et al.			
	AD	5,928,893	07/27/99	Kang et al.			
	AE	6,210,669	04/03/01	Aruffo et al.			
	AF	6,303,121	10/16/01	Kwon			
	AG	6,355,779	03/12/02	Goodwin et al.			
	AH	6,458,934	10/01/02	Hong et al.			
	AI	2002/0168719	11/14/02	Kwon			

### Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AJ	WO 96/29348	09/26/96	PCT				
	AK	WO 98/16249	04/23/98	PCT				
	AL	WO 00/29445	05/25/00	PCT				
	AM	WO 00/41508	07/20/00	PCT				
	AN	WO 01/62905	08/30/01	PCT				

### Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AO	BD Pharmingen™ Technical Data Sheet, "Purified Rat Anti-Mouse Ly-6G (Gr-1) Monoclonal Antibody for Immunohistochemistry (IHC) page 1 of 3
	AP	Adachi et al., "Aberrant transcription caused by the insertion of an early transposable element in an intron of the Fas antigen gene of <i>lpr</i> mice," <i>Proc. Natl. Acad. Sci. USA</i> , 1993, 90:1756-1760
	AQ	Alderson et al., "Molecular and biological characterization of human 4-1BB and its ligand," <i>Eur. J. Immunol.</i> , 1994, 24:2219-2227
	AR	Cohen and Eisenberg, " <i>lpr</i> and <i>gld</i> : Single Gene Models of Systemic Autoimmunity and Lymphoproliferative Disease," <i>Annu. Rev. Immunol.</i> , 1991, 9:243-269
	AS	Cole et al., "The EBV-Hybridoma Technique and its Application to Human Lung Cancer," <i>Monoclonal Antibodies and Cancer Therapy</i> , 1985, Alan R. Liss, Inc. pp. 77-96
	AT	Cote et al., "Generation of human monoclonal antibodies reactive with cellular antigens," <i>Proc. Natl. Acad. Sci. USA</i> , 1983, 80:2026-2030

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**Other Documents (include Author, Title, Date, and Place of Publication)**

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	AU	Ding et al., "Release of Reactive Nitrogen Intermediates and Reactive Oxygen Intermediates from Mouse Peritoneal Macrophages," <u>J. Immunol.</u> , 1988, 141:2407-2412
	AV	Finck et al., "Treatment of Murine Lupus with CTLA4Ig," <u>Science</u> , 1994, 265:1225-1227
	AW	Fleming et al., "Selective Expression of Ly-6G on Myeloid Lineage Cells in Mouse Bone Marrow," <u>J. Immunol.</u> , 1993, 151:2399-2408
	AX	Foell et al., "CD137 costimulatory T cell receptor engagement reverses acute disease in lupus-prone NZB x NZW F <sub>1</sub> mice," <u>J. Clin. Invest.</u> , 2003, 10:1505-1518
	AY	Goodwin et al., "Molecular cloning of a ligand for the inducible T cell gene 4-1BB: a member of an emerging family of cytokines with homology to tumor necrosis factor," <u>Eur. J. Immunol.</u> , 1993, 23:2631-2641
	AZ	Haendeler et al., "Nitric Oxide and Apoptosis," <u>Vitam. Horm.</u> , 1999, 57:49-77
	AAA	Hestdal et al., "Characterization and Regulation of RB6-8C5 Antigen Expression on Murine Bone Marrow Cells," <u>J. Immunol.</u> , 1991, 147:22-28
	ABB	Hoffman, "T Cells in the Pathogenesis of Systemic Lupus Erythematosus," <u>Front. Biosci.</u> , 2001, 6:D1369-1378
	ACC	Hunter, "Diabetes in pregnancy," <u>Effective Care in Pregnancy and Childbirth</u> , Vol. 1, 1989, Chalmers et al. (eds.), Oxford University Press, pp. 578-593
	ADD	Huse et al., "Generation of a Large Combinatorial Library of the Immunoglobulin Repertoire in Phage Lambda," <u>Science</u> , 1989, 246:1275-1281
	AEE	Jacobson et al., "Unique site of IgG2a and rheumatoid factor production in MRL/lpr mice," <u>Immunol. Rev.</u> , 1997, 156:103-110
	AFF	Kaliyaperumal et al., "Antigen-Specific Therapy of Murine Lupus Nephritis Using Nucleosomal Peptides: Tolerance Spreading Impairs Pathogenic Function of Autoimmune T and B Cells," <u>J. Immunol.</u> , 1999, 162:5775-5783
	AGG	Kalled et al., "Anti-CD40 Ligand Antibody Treatment of SNF <sub>1</sub> Mice with Established Nephritis: Preservation of Kidney Function," <u>J. Immunol.</u> , 1998, 160:2158-2165
	AHH	Kelley and Wüthrich, "Cytokines in the Pathogenesis of Systemic Lupus Erythematosus," <u>Semin. Nephrol.</u> , 1999, 19:57-66
	AII	Köhler et al., "Continuous cultures of fused cells secreting antibody of predefined specificity," <u>Nature</u> , 1975, 256:495-497
	AJJ	Kozbor and Roder, "The production of monoclonal antibodies from human lymphocytes," <u>Immunology Today</u> , 1983, 4:72-79
	AKK	Kwon et al., "4-1BB: Still in the Midst of Darkness," <u>Mol. Cells</u> , 2000, 10:119-126
	ALL	Lawson et al., "Treatment of murine lupus with cDNA encoding IFN- $\gamma$ R/Fc," <u>J. Clin. Invest.</u> , 2000, 106:207-215
	AMM	Lenardo et al., "MATURE T LYMPHOCYTE APOPTOSIS—Immune Regulation in a Dynamic and Unpredictable Antigenic Environment," <u>Annu. Rev. Immunol.</u> , 1999, 17:221-253
	ANN	Liang et al., "Autoantibody Responses and Pathology Regulated by B7-1 and B7-2 Costimulation in MRL/lpr Lupus," <u>J. Immunol.</u> , 2000, 165:3436-3443
	AOO	Melero et al., "Amplification of tumor immunity by gene transfer of the co-stimulatory 4-1BB ligand: synergy with the CD28 co-stimulatory pathway," <u>Eur. J. Immunol.</u> , 1998, 28:1116-1121

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<b>Other Documents (include Author, Title, Date, and Place of Publication)</b>		
Examiner Initial	Desig. ID	Document
	APP	Melero et al., "Monoclonal antibodies against the 4-1BB T-cell activation molecule eradicate established tumors," <u>Nature Medicine</u> , 1997, 3:682-685
	AQQ	Melero et al., "NK1.1 Cells Express 4-1BB (CDw137) Costimulatory Molecule and Are Required for Tumor Immunity Elicited by Anti-4-1BB Monoclonal Antibodies," <u>Cellular Immunology</u> , 1998, 190:167-172
	ARR	Mohan et al., "Interaction Between CD40 and Its Ligand gp39 in the Development of Murine Lupus Nephritis," <u>J. Immunol.</u> , 1995, 154:1470-1480
	ASS	Morse et al., "Abnormalities Induced by the Mutant Gene <i>lpr</i> : Expansion of a Unique Lymphocyte Subset," <u>J. Immunol.</u> , 1982, 129:2612-2615
	ATT	Pollok et al., "4-1BB T-cell antigen binds to mature B cells and macrophages, and costimulates anti- $\mu$ -primed splenic B cells," <u>Eur. J. Immunol.</u> , 1994, 24:367-374
	AUU	Pollok et al., "Inducible T Cell Antigen 4-1BB," <u>J. Immunol.</u> , 1993, 150:771-781
	AVV	Salih et al., "4-1BB ligand – just another costimulating molecule?" <u>International Journal of Clinical Pharmacology and Therapeutics</u> , 2002, 40:348-353
	AWW	Sneller et al., "A Novel Lymphoproliferative/Autoimmune Syndrome Resembling Murine <i>lpr/gld</i> Disease," <u>J. Clin. Invest.</u> , 1992, 90:334-341
	AXX	Suda and Nagata, "Why do defects in the Fas-Fas ligand system cause autoimmunity?" <u>J. Allergy Clin. Immunol.</u> , 1997, 100:S97-101
	AYY	Sun et al., "Signaling of 4-1BB Leads to Amelioration of Experimental Autoimmune Encephalomyelitis," <u>FASEB J.</u> , 2001, Vol. 5, page A1210
	AZZ	Theofilopoulos and Lawson, "Tumour necrosis factor and other cytokines in murine lupus," <u>Ann. Rheum. Dis.</u> , 1999, 58 Suppl. 1:I49-55
	AAAA	Theofilopoulos and Dixon, "Etiopathogenesis of Murine SLE," <u>Immunol. Rev.</u> , 1981, 55:179-216
	ABBB	Vinay et al., "Role of 4-1BB in immune responses," <u>Semin. Immunol.</u> , 1998, 10(6):481-489
	ACCC	Wilcox et al., "Provision of antigen and CD137 signaling breaks immunological ignorance, promoting regression of poorly immunogenic tumors," <u>J. Clin. Invest.</u> , 2002, 109:651-659
	ADDD	Williams et al., "Nitric Oxide Synthase Plays a Signaling Role in TCR-Triggered Apoptotic Death," <u>J. Immunol.</u> , 1998, 161:6526-6531
	AEEE	Wofsy, "Treatment of Murine Lupus with Anti-CD4 Monoclonal Antibodies," <u>Immunol. Ser.</u> , 1993, 59:221-236
	AFFF	Wofsy et al., "The Proliferating Cells in Autoimmune MRL/ <i>lpr</i> Mice Lack L3T4, an Antigen on "Helper" T Cells that Is Involved in the Response to Class II Major Histocompatibility Antigens," <u>J. Immunol.</u> , 1984, 132:2686-2689

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